

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A process for producing a transgenic sugar beet plant, which comprises:

- a) transforming at least one sugar beet cell with at least two transgenes, with the first transgene encoding a vacuolar pyrophosphatase (V-PPase) and the second transgene encoding ~~at least one of~~ a cytosolic ~~[[and]]~~ or a nucleus-located soluble pyrophosphatase (C-PPase),
- b) culturing and regenerating the transformed cells under conditions which lead to the complete regeneration of the transgenic beet plant, and
- c) obtaining a transgenic beet plant having ~~at least one of~~ an increased sucrose content in the beet, ~~an increased meristem activity, an extended meristem activity and~~ or a reduced rate of sucrose breakdown during storage.

2. (Previously Presented) The process as claimed in claim 1, wherein the first transgene comprises a nucleic acid sequence which is selected from the group of nucleotide sequences consisting of

- a) a nucleotide sequence depicted in SEQ ID No. 4, or a sequence which is complementary thereto,
- b) a nucleotide sequence encoding the amino acid sequence depicted in SEQ ID No. 5, or a sequence which is complementary thereto, and
- c) a nucleotide sequence which exhibits a sequence identity of more than 80% with the sequence according to a) or b).

3. (Previously Presented) The process as claimed in claim 1, wherein the second transgene comprises a nucleic acid sequence which is selected from the group of nucleotide sequences consisting of

- a) a nucleotide sequence depicted in SEQ ID No. 1, or a sequence which is complementary thereto,
- b) a nucleotide sequence encoding the amino acid sequence depicted in SEQ ID No. 2, or a sequence which is complementary thereto, and

- c) a nucleotide sequence which exhibits a sequence identity of more than 80% with the sequence according to a) or b).
4. (Previously Presented) The process as claimed in claim 1, wherein at least one of the first and the second transgene is arranged on a vector.
5. (Previously Presented) The process as claimed in claim 1, wherein the vector is equipped for overexpressing at least one of the first and the second transgene.
6. (Previously Presented) The process as claimed in claim 1, wherein at least one of the first and the second transgene is operatively linked, on the vector, to a promoter.
7. (Previously Presented) The process as claimed in claim 1, wherein the promoter is a tissue-specific promoter, a constitutive promoter, an inducible promoter or a combination thereof.
8. (Previously Presented) The process as claimed in claim 1, wherein the promoter is a promoter from *Beta vulgaris*, *Arabidopsis thaliana* or the cauliflower mosaic virus.
9. (Withdrawn) The process as claimed in claim 1, wherein the promoter is the CaMV35S promoter.
10. (Previously Presented) The process as claimed in claim 1, wherein the promoter is a *Beta vulgaris* V-PPase promoter.
11. (Previously Presented) The process as claimed in claim 10, wherein the promoter comprises a nucleotide sequence which is selected from the group of nucleotide sequences consisting of
- a) a nucleotide sequence as depicted in SEQ ID No. 6 or 7, or a sequence which is complementary thereto, and
- b) a nucleotide sequence which exhibits a sequence identity of more than 80% with one of the sequences as depicted in SEQ ID No. 6 or 7.
12. (Withdrawn) The process as claimed in claim 1, wherein the promoter is a sucrose synthase promoter.
13. (Previously Presented) The process as claimed in claim 1, wherein the promoter is a storage-specific promoter.

14. (Previously Presented) The process as claimed in claim 1, wherein the vector possesses introns enhancers or other regulatory elements.
15. (Previously Presented) The process as claimed in claim 1, wherein the first and second transgenes are arranged together on a single vector.
16. (Withdrawn) The process as claimed in claim 1, wherein the first and second transgenes are arranged on different vectors.
17. (Previously Presented) The process as claimed in claim 1, wherein the first and second transgenes are transformed simultaneously.
18. (Previously Presented) The process as claimed in claim 1, wherein the transformation is at least one of a biolistic transformation, an electrotransformation, an agrobacterium-mediated transformation and a virus-mediated transformation.
19. (Previously Presented) A transgenic plant containing at least one transformed cell, said plant obtained using a process as claimed in claim 1.
20. (Previously Presented) The transgenic plant as claimed in claim 19, which exhibits an increased content of sucrose in comparison to a corresponding non-transgenic plant.
21. (Previously Presented) The transgenic plant as claimed in claim 19, which exhibits an increase in meristem activity during growth in comparison to a corresponding non-transgenic plant.
22. (Previously Presented) The transgenic plant as claimed in claim 19, which exhibits a decreased rate of sucrose breakdown during storage in comparison to a corresponding non-transgenic plant.
23. (Previously Presented) A harvesting or propagation material from a transgenic plant as claimed in claim 19.
- 24 - 31 (Canceled)

Please add the following new claims:

32. (New) The process as claimed in claim 1, wherein the vacuolar pyrophosphatase (V-PPase) is a V-PPase from *Beta vulgaris* and wherein the cytosolic or nucleus-located pyrophosphatase (C-PPase) is a C-PPase from *Beta vulgaris*.

33. (New) The process as claimed in claim 1, wherein the first and the second transgenes are located on a single vector and wherein at least one of the first and the second transgene is operatively linked to a *Beta vulgaris* V-PPase promoter.
34. (New) A process for producing a transgenic sugar beet plant, which comprises:
- a) transforming at least one sugar beet cell with at least two transgenes, with the first transgene encoding a vacuolar pyrophosphatase (V-PPase) and the second transgene encoding a cytosolic or a nucleus-located soluble pyrophosphatase (C-PPase), wherein at least one said transgene is linked to a promoter having the nucleotide sequence depicted in SEQ ID No. 6 and wherein the first and the second transgene are located on a single vector,
 - b) culturing and regenerating the transformed cells under conditions which lead to the complete regeneration of the transgenic beet plant, and
 - c) obtaining a transgenic beet plant having an increased sucrose content in the beet or a reduced rate of sucrose breakdown during storage,
- wherein the first transgene has the nucleotide sequence depicted in SEQ ID No. 4 and the second transgene has the nucleotide sequence depicted in SEQ ID No. 1.